Wyoming Nutrient Strategy 2019 Priority Items and Next Steps

January 2019 Draft

Boysen Reservoir Nutrient Initiative

- Continue to fund monthly nutrient monitoring at USGS sites on the three major tributaries (Wind River, Fivemile Creek, and Muddy Creek) and Wind River downstream from Boysen Dam.
- 2. Share compiled cyanobacteria and nutrient data with stakeholders.
- 3. Draft clear goals and measurable objectives for reducing nutrient loading to Boysen Reservoir.
- 4. Identify and propose work groups to achieve goals and objectives.
- 5. Share goals, objectives, proposed work groups, etc. with stakeholders for feedback.
- 6. Finalize goals, objectives, and work groups, and initiate conversations to achieve objectives.
- 7. Identify administrative support needs for the initiative and technical and financial resources to meet those needs.

Other Efforts

Criteria Development

- Continue working on numeric nutrient criteria for Wyoming Basin Lakes by revising the technical support document based on external peer review; completing internal review of technical support document; sharing technical support document with the United States Environmental Protection Agency (USEPA); revising technical support document based on USEPA feedback; and sharing with the Wyoming Nutrient Work Group.
- 2. Continue working on developing more detailed assessment methods aimed at identifying whether existing narrative standards that address nutrient pollution are being met or exceeded. Share draft methods with the Wyoming Nutrient Work Group.
- 3. Continue to collect data on surface waters that can be used to support criteria development.
- 4. Develop nutrient monitoring plans for waters included in Wyoming's biennial Water Quality Inventory Report (i.e., Laramie River, Brooks Lake, etc.).
- 5. Consider how to prioritize waters on Wyoming's 303(d) List of Impaired Waters for criteria development and nutrient reduction efforts.

Harmful Cyanobacterial/Algal Blooms

- 1. Work with water management agencies (State Parks, Game and Fish, etc.), Department of Health, and Wyoming Livestock Board to improve monitoring, ADVISORY, and public notification process. Explore options for improving surveillance, monitoring, and increasing public awareness about harmful cyanobacterial blooms (HCBs).
- 2. Update harmful cyanobacterial bloom action plan and standard operating procedures and share with the Wyoming Nutrient Work Group; post updated plan on DEQ's HCBs webpage.
- 3. Continue to refine process for using satellite imagery to inform HCBs management.
- 4. Update HCBs webpage to include: current and past ADVISORIES, in both table and map formats; an updated HCB photo gallery with additional images, cyanotoxin, and cyanobacteria densities.
- 5. Evaluate need to analyze water samples for cyanotoxins other than microcystin.

- 6. Coordinate with USEPA and public water supplies on taste and odor concerns that may result from HCBs.
- 7. Continue to request updates from USEPA regarding cyanotoxin monitoring under the fourth Unregulated Contaminant Monitoring Rule.

Point Sources

- 1. Develop nutrient outreach document for point sources that includes, but is not limited to, an overview of nutrient pollution in Wyoming, information on plans to develop numeric nutrient criteria, general ranges of possible criteria, Boysen Reservoir Initiative, potential implications for point sources, recommendations for planning for future nutrient effluent limits, etc.
- 2. Continue to incorporate nutrient monitoring requirements into Wyoming Pollutant Discharge Elimination System (WYPDES) permits that discharge upstream of priority waters.
- 3. Develop a point source nutrient webpage with information and resources for permittees interested in addressing nutrient pollution.
- 4. Support the City of Laramie wastewater treatment plant's voluntary enhanced nutrient removal work.
- 5. Explore options for additional voluntary extended aeration plant enhanced nutrient removal work.
- 6. Compile information on successful wastewater reuse/recycling programs in Wyoming.
- 7. Summarize process for permitting effluent reuse/recycling wastewater in Wyoming, identify potential barriers, and develop strategies to address potential barriers.
- 8. Identify an outreach strategy to educate point sources and potential cooperators about reuse/recycling.

Nonpoint Sources

- 1. Continue discussions with Wyoming Natural Resource Conservation Service (NRCS) to educate NRCS staff on water quality issues related to nutrients and DEQ staff on NRCS programs, including the Soil Health Initiative.
- 2. Continue discussions with the Nonpoint Source Task Force on ways to strategically use Nonpoint Source Program grant funds to address nutrient pollution in Wyoming.

Education and Outreach

- 1. Work with Wyoming Nutrient Work Group to develop and finalize 2019 priorities.
- 2. Report progress and updates to Wyoming Nutrient Work Group.
- 3. Update nutrient pollution websites with relevant information
- 4. Identify strategies to increase public awareness about nutrient pollution and efforts to address nutrient pollution.